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# A NEW SPECIES AND NEW RECORDS OF *CYCLOCEPHALA* FROM GUATEMALA (COLEOPTERA: MELOLONTHIDAE)

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*Abstract.*—A new Guatemalan species of *Cyclocephala* is described and modifications to Endrodi's key to the genus are included to allow their identification. New country records for Guatemala are given for *C. aequatoria* Endrodi, *C. alexi* Ratcliffe and Delgado, and *C. prolongata* Arrow.

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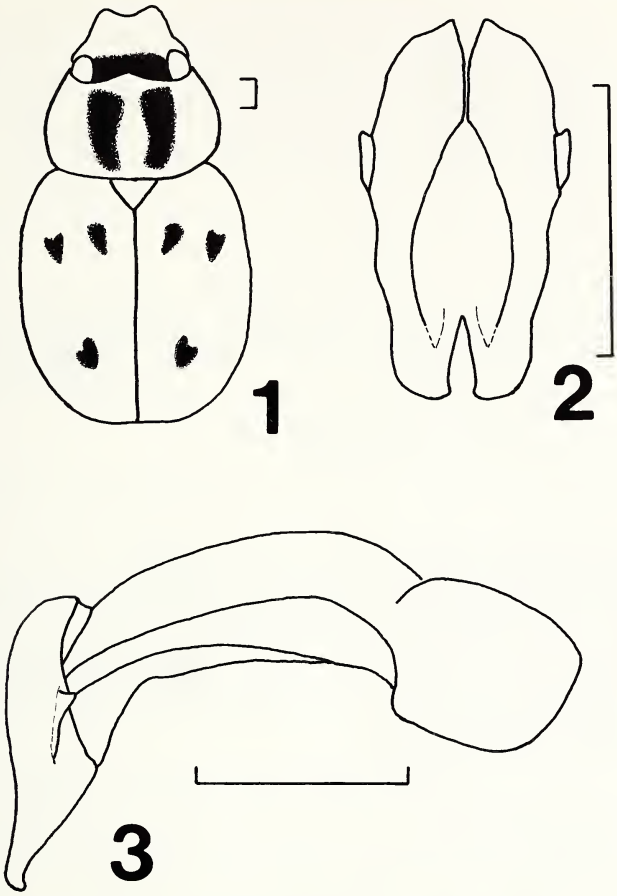
The American genus *Cyclocephala* includes more than 250 described species, most of which are distributed in South America (Ratcliffe, 1991). However, many endemic species are present in North and Central America (cf. Endrodi, 1985; Ratcliffe, 1992). Guatemalan species of this genus are poorly studied. Here we describe a new species and record for the first time three species of this genus for Guatemala.

## **Cyclocephala batesi**, new species
(Figs. 1–3)

*Type material.* Holotype male, labeled: "GUATEMALA: Zacapa, La Unión, 10-V-1992, Alt. 1,300 m, bosque nuboso, luz H. A. Castañeda, col." Allotype female and one female paratype labeled as holotype. Holo and Allotype deposited at the Universidad del Valle de Guatemala (Guatemala City), paratype deposited in collection of Brett C. Ratcliffe (Lincoln, Nebraska).

*Description.* Holotype male. Total length 14.5 mm; maximum width (to middle of elytra) 7.4 mm. Color testaceous, except for fuscous posterior middle of frons, vertex, two large spots on pronotum and three small spots on each elytron (Fig. 1). Dorsum glabrous, with scattered, minute setae on apex of elytra only. Clypeus subtapezoidal, sides convergent, apex distinctly emarginate with front angles rounded and feebly reflexed; clypeal surface and frons finely reticulated; clypeus with dense and medium-sized punctures that become sparser and smaller towards frons and vertex. Interocular width equals 3.3 transverse eye diameters. Antenna 10-jointed, club shorter than segments 2–7. Pronotum with posterior angles evenly rounded, base unmargined; pronotal surface with punctures dense and larger than those of clypeus, punctures sparser and smaller near mid-line. Elytra with larger punctures than those of pronotum, intermixed with minute punctures; rows discernible. Pygidium evenly convex, disc with minute and medium-sized punctures, sides rugopunctate, surface with small setae, setae denser on sides. Protibiae tridentate, basal tooth smaller than apical ones and slightly more removed from median tooth than median tooth is from apical;




Figs. 1–3. *Cyclocephala batesi* n. sp., holotype. 1. Dorsal pattern. 2. Caudal view of parameres. 3. Lateral view of parameres. Bar = 1 mm.

protarsal inner claw finely split just before apex; meso- and metatarsi only slightly longer than respective tibiae. Genitalia with parameres short and slightly convergent to apex (Figs. 2–3).

Allotype female. Total length 14.3 mm; maximum width (about at the posterior third of elytra) 7.7 mm. As holotype except in the following respects: pronotal spots larger and partially coalescing at anterior third; surface of clypeus and frons not reticulated; clypeal punctation denser and deeper; elytra with lateral margin distinctly expanded behind middle; pygidium flatter, glabrous, and with sparse, small punctures that become slightly larger and denser at sides; protibiae with basal tooth larger and with teeth equidistant; protarsal inner claw not enlarged; meso- and metatarsi slightly shorter than respective tibiae and a little stouter.

*Type locality.* La Unión, Zacapa, Guatemala.

*Etymology.* Named after the eminent entomologist Henry Walter Bates (1825–1892), in recognition of his many contributions to the knowledge of the Neotropical insects. *Remarks.* In Endrodi's (1985) key to species of *Cyclocephala,* this species will key only as far as couplets 291/292 (male key) and 119/120 (female key) where neither choice properly describes the character states present in *C. batesi.* Therefore, we add the new couplets 290a/290b and 118a/118b to the keys as follows:

Males:

290(285) Disc of pronotum strongly punctate, more strongly so (or rarely finer than frons).

290a(290b) Each elytron with three spots. Pygidium with short setae, setae denser at sides. Parameres short, without preapical tooth on outer side. Length 14–15 mm. Guatemala ..... *batesi* Delgado and Castañeda

290b(290a) Each elytron with four or six spots. Pygidium glabrous. Parameres long or with preapical tooth on outer side.

291(292) Pronotum with two longitudinal ..... etc.

Females:

118(113) Surface bare or at most with a few very short setae on apical half of elytra. Pygidium rarely more distinctly setose.

118a(118b) Each elytron with three spots and without lateral knob. Pygidium scarcely punctate. Length 14–15 mm. Guatemala. ..... ..... *batesi* Delgado and Castañeda

118b(118a) Each elytron with four or six spots and with lateral knob. Pygidium densely punctate.

119(120) Dilation of lateral margin ..... etc.

*Distribution. Cyclocephala batesi* is only known from the type locality, situated at the region of Trifinio-El Portillo, which includes mountainous frontier areas between Guatemala, Honduras and El Salvador. The discovery of this species helps to support the idea that this region is a zone of high endemism, as suggested by Schuster (1992) on the basis of the distribution of passalid beetles in northern Central America.

### *Cyclocephala aequatoria* Endrodi

This species was previously known from Mexico and Ecuador (Endrodi, 1985). The following specimens represent a new country record: Guatemala, Alta Verapaz, Panzós, Finca Pueblo Viejo, 14-VI-1989, Alt. 10 m, luz, E. Cano, col.(2 females); same data but 16-VI-1989 (1 male); same data but 24-VI-1989 (3 males, 5 females); same data but 30-VI-1990 (3 females).

### *Cyclocephala alexi* Ratcliffe and Delgado

This species was described from Mexico and recorded only from the frontier state of Chiapas (Ratcliffe and Delgado, 1990). The following male specimen constitutes a new country record: Guatemala, Baja Verapaz, Purulhá, 21-III-1993, Alt. 1,737 m, A. Morán, col.

*Cyclocephala prolongata* Arrow

This species has been recorded from Mexico, Belize, Honduras, Nicaragua, Panama, Colombia and Peru (Ratcliffe, 1992). The following specimens represent a new country record: Guatemala, Alta Verapaz, Panzós, Finca Pueblo Viejo, 14-VI-1989, Alt. 10 m, luz, E. Cano, col. (2 females); same data but 16-VI-1989 (3 females); same data but 24-VI-1989 (1 male, 1 female); same data but 30-VI-1990 (1 male); Guatemala, Izabal, Cerro San Gil, Las Escobas, 24-VI-1993, N. Girón, col. (1 male).

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